STROKE MORTALITY IN WEST VIRGINIA

In 2000, West Virginia's overall age-adjusted² rate of stroke mortality was 61.4 deaths per 100,000 population, slightly higher than the U.S. rate of 60.8. Figure 22 illustrates the geographical distribution of stroke mortality across the country in that year (117). (The southeastern region called the "Stroke Belt" because of traditionally high rates of stroke mortality is clearly identified.) Individual state rates for 2000 are found in Appendix C.



Table 2 compares age-adjusted stroke mortality rates by selected demographic characteristics for West Virginia and the United States for 2001. State rates were slightly higher than national rates in all demographic categories except one. African-Americans living in West Virginia had a rate of stroke death in 2001 that was about 7% lower than African-Americans in the country as a whole.

Lower rates among West Virginia's African-American population were also found by the authors of the *CDC's Atlas of Stroke Mortality*, who aggregated data from 1991through 1998 in order to analyze racial, ethnic, and geographic disparities in stroke deaths in the United States and within each state (35). Figure 23 depicts their findings for West Virginia and the United States as a whole. While little difference is seen in the rates among whites, the rates among African-Americans in the state were lower than comparable U.S. rates among both sexes. Stroke mortality among African-Americans in West Virginia, however, is still much higher than that among the white population.

²Age-adjusted to the 2000 U.S. standard million.

Table 2. Cerebrovascular Disease Mortality Rates by Selected Demographic CharacteristicsWest Virginia and United States, 2001					
Characteristic	West Virginia			United States	
	# of Deaths	Crude Rate	Age-adjusted Rate*	Crude Rate	Age-adjusted Rate*
Total	1,262	69.8	59.8	57.4	57.9
Male	482	54.8	60.6	45.2	59.0
Female	780	83.9	57.6	69.2	56.4
White	1,217	70.8	59.9	63.9	56.0
Black	44	76.9	74.4	54.4	79.9
45-64	103	22.6		23.9	
65+	1,136	410.3		409.8	

*Rates are age-adjusted to the U.S. 2000 standard million.



Figure 23. Stroke Death Rates by Race and Sex West Virginia and United States, 1991-1998

Premature death, or death before the age of 65, is a significant problem among African-American residents of West Virginia. Data were aggregated for five years, 1997-2001; during that time, *nearly one in four (23%) stroke deaths among African-Americans occurred before the age of* 65. Among white residents, in contrast, 10% of stroke deaths were premature. Calculating the rate of YPLL (i.e., Years of Potential Life Lost before Age 65, or the difference between age 65 and the age at death for all deaths from stroke) by race for 1997-2001 yielded a rate of 297.1 YPLL per 100,000 population among African-Americans compared with 97.4 among the state's white population.

CDC used 1999 data to examine the distribution of stroke-related deaths by place of death, defined as either pretransport, dead on arrival at a hospital, in the emergency department, or in the hospital (118). When compared to the nation as a whole, similar percentages of West Virginia deaths occurred either during transport, i.e., DOA, or in the emergency department. Differences were noted, however, in the percentages of stroke deaths that occurred pretransport or in the hospital; a smaller percentage of deaths in the state were pretransport (39.2% vs. 47.6%) while a larger percentage occurred in the hospital (56.7% vs. 48.0%).

In 2001, stroke death rates showed a wide range by county (Figure 24). Summers County reported the lowest rate at 15.1 deaths per 100,000 population, while Calhoun County had the highest rate at 106.2. Individual county rates are found in Appendix D (caution must be used in interpreting rates based upon small numbers of events).

